Roads in the Fork: Railroads 2019 & Beyond

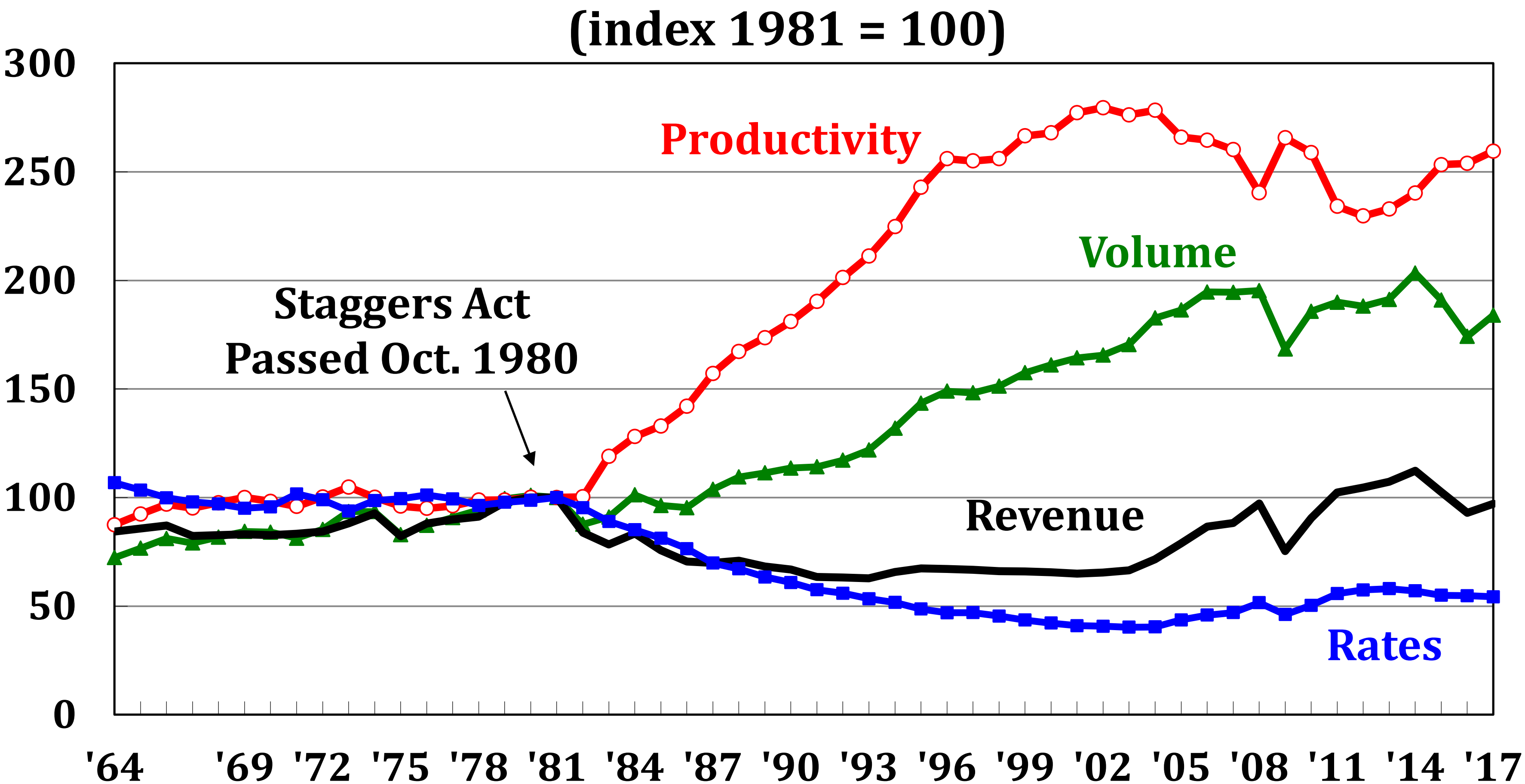
ABH Consulting

SEARS

Savannah

March 2019

The U.S. Freight Railroad Industry in One Chart



Source: AAR

2019 Will Be Calm & Simple – Not!

- Political Risk (boom in Gondolas for The Wall?)
- Trade Risk (soybeans, autos – etc.., etc.., etc..)
- Economic Risk – slowdown, at long last?
- Earnings Risk? Not initially (starting next week….)
- Oil Price Risk – Now, cheap oil is a *bad* thing
- Rail Operating Risk – Service Metrics* must improve! (and not just be “re-stated”)
- PSR Risk (operational, regulatory)
- Technological Risk
- Markets Risk – and potential impact on Capex
- Management Risk – Activists, Big Transition Years (UP, BNSF, NSC, CSX….)

Renaissance 2?

- New Operating Plans!! PSR vs Other? PSR vs PHH?
- Intermodal? Opportunity or Missed Opportunity?
- Merchandise: Plastics? Housing? Perishables? ? Infrastructure? (??)
- CBR back from the dead? Sand back to the dead?
- Trade?? 42% *<u>US</u>* RR units (in 2014….)
- IT spend? Versus….
- IT Threat? (AV/Tesla/Amazon/etc.)?
- Capex vs. FCF in the era of the Activist?
- *New "Golden Age" of/for Short Lines!*

Reviewing Q4/18 & 2019 Preview

- 7 of 7 Rails Beat Consensus Expectations
- Earnings Growth Averaged 37% on +10% Revenues (thank you, tax cut!)
- OR average 62.7% (BNSH high, CP low) -170bps
- 5/7 raise 2019 Capex
- 2019 Headwinds: Slow economic growth, trade issues, truck normalcy, Polar Vortex, Govt. interference? PSR?
- 2019 Tailwinds: PSR? Fluidity, CBR, Plastics, IM, Pricing

Blair Switch Project (Talking Points Part 1)

- I follow *railways,* not suppliers (but I did just address WAB/GET management)
- PSR impact – a fleet shrinker (at first)
- Class One tech focus increasing daily (moving PTC from "unfunded mandate" to digital railway "backbone"
  - Oliver Wyman/***RailTrends*** speech on tech "mojo"
  - Two C1s working on linking PTC to Trip Optimizer
  - KSU has a C-I O; plans "full automation in ~5 years" (vs WAB target)
    - Rail Labor: "Section 6 notices" out this fall; goal will be <u>one</u>-man
- NS doing its own loco conversion; CN in process of fleet upgrade
- 2019F Capex record: 5-1-1 (5/7 increased)

BSP/Talking Points - 2

- PTC 1.0 still not done (83% miles)
- “60 Minutes” and accidents (and public scrutiny)
- New Congress, etc.
- Short Line’s “2nd Golden Age”?
- SL/GE pilot project with major paper shipper
- Short sellers
- Service! Info! Visibility! Reliability!
- Amazon – and now Wal-Mart

PSR Spectrum
Precision Scheduled Railroading

- Hunter: IC to CN to CP to CSX
- PHH: CN, CP, soon CSX?
- PSR without EHH+: “Measured”, “Lite” or “2.0”?
- PSR as part of G55+0/Unified Plan 2020
- PSR tenets informing new Operating Plan: NSC
- PSR-by-Neighbor: KSU
- PSR-by-Connection: GWR
- PSR? BNSF

So – What is PSR?

- Is it new? (car-focus vs train, etc..) – components are not
- Is it a playbook or an *attitude?*
- Is it "just" cost cutting?
- Is it closing humps?
- Is it point to point?
- Can intermodal survive PSR?
- Is it key-man driven? (Change agent)
- Does it work? PSR and PHR!
- Is it too short term oriented? PSR & PHR!!

Challenges/Opportunities to/for SLs

- SLs lack true pricing power (and Fuel Surcharge coverage)
- SLHCs –may - lose local focus; tough central/decentralized strategic mix
- SLs do not participate in the hotter markets:
  - IM to any degree
  - nor in Mexico
- *C1s more focused on car-load (SL sweet-spot)*
- *C1s more focused on ROI (create more SLs?)*

Rails & Politics

- Now more than ever!
- Trade!! (NAFTA 2.0; China; steel/aluminum tariffs for *national security* reasons)
- Freight *and* Passenger issues, as always
- Funding & Infrastructure Spend(ASCE Grade B)
- Technology Impact
- Social Impact (demographics, Millennials, etc.)
- Regulatory Impact – see UP & PSR….
- Tweet Impact

Big Issues Winter 2019

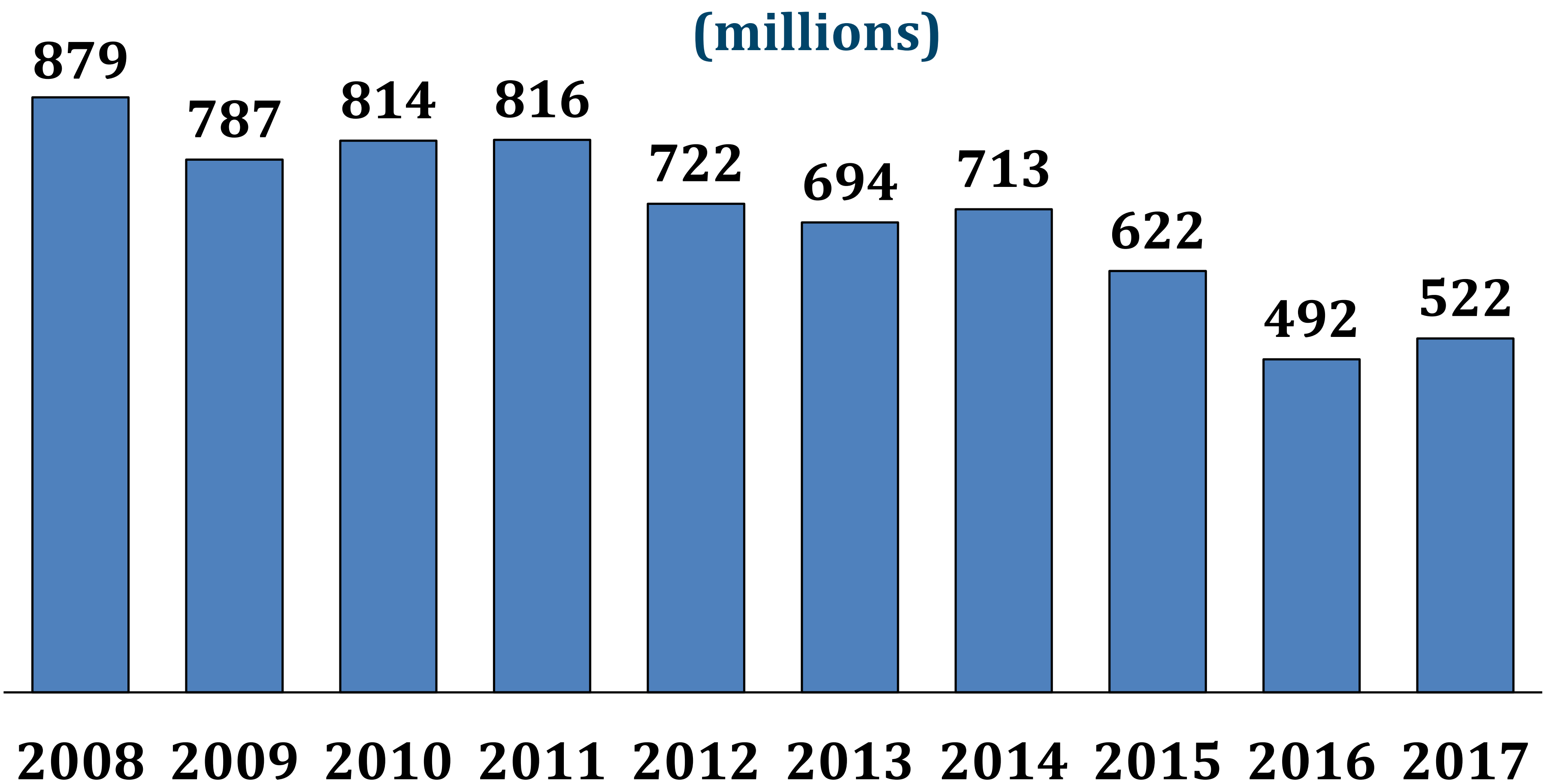
"Trump has made economic uncertainty great again"/Chief Economist, Gluskin Sheff

- *CSX "Post-Hunter"* – Worst-to-First!
- *UNP, NSC (and KSU? GWR?) join the PSR-Party! (?)*
- *Volume/economic outlook – plenty of demand, tougher comps*
- *Q3/18 earnings all beat expectations – does it matter? (Tax Cut Impact)*
- *Orange Crush* – Washington on coal/trade/infrastructure/regulation/MAFTA vs NAFTA
- Trade impact is underestimated (AAR's 2014 42% loads)
- *RR Service Improvements* – CSX (ok) CN (ahead of schedule) BUT- UP, NS (anyone left out?) – must happen!
- *2018 Capex broke the 2-Year downward trend; 2019 Capex Plans* (hardly unrelated; see NRC, company announcements) – holding the short-termists at bay? Investing in IT & Growth? *Is service improvement truly on the way?*
- *M&A back on the table? (WHY?!?!)*

RRs and NAFTA

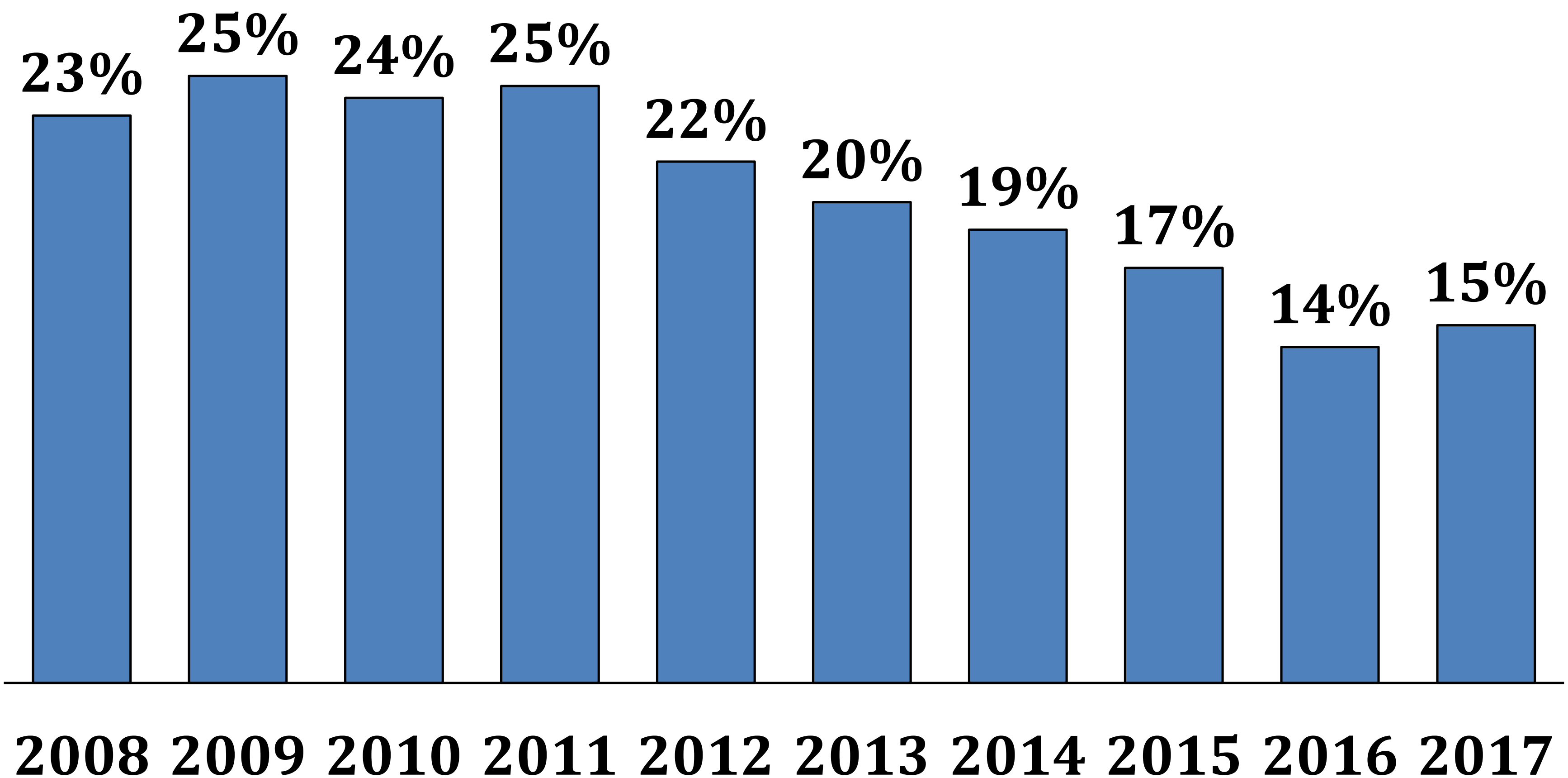
- U.S. to Canada: intermodal, motor vehicles, chemicals, coal, food
- U.S. to Mexico: motor vehicles, intermodal, food, grain, chemicals
- Mexico to U.S.: motor vehicles & parts, food, electrical machinery
- Canada to U.S.: intermodal, chemicals, lumber & paper, motor vehicles, grains

Sharp Decline in Rail Coal Tonnage



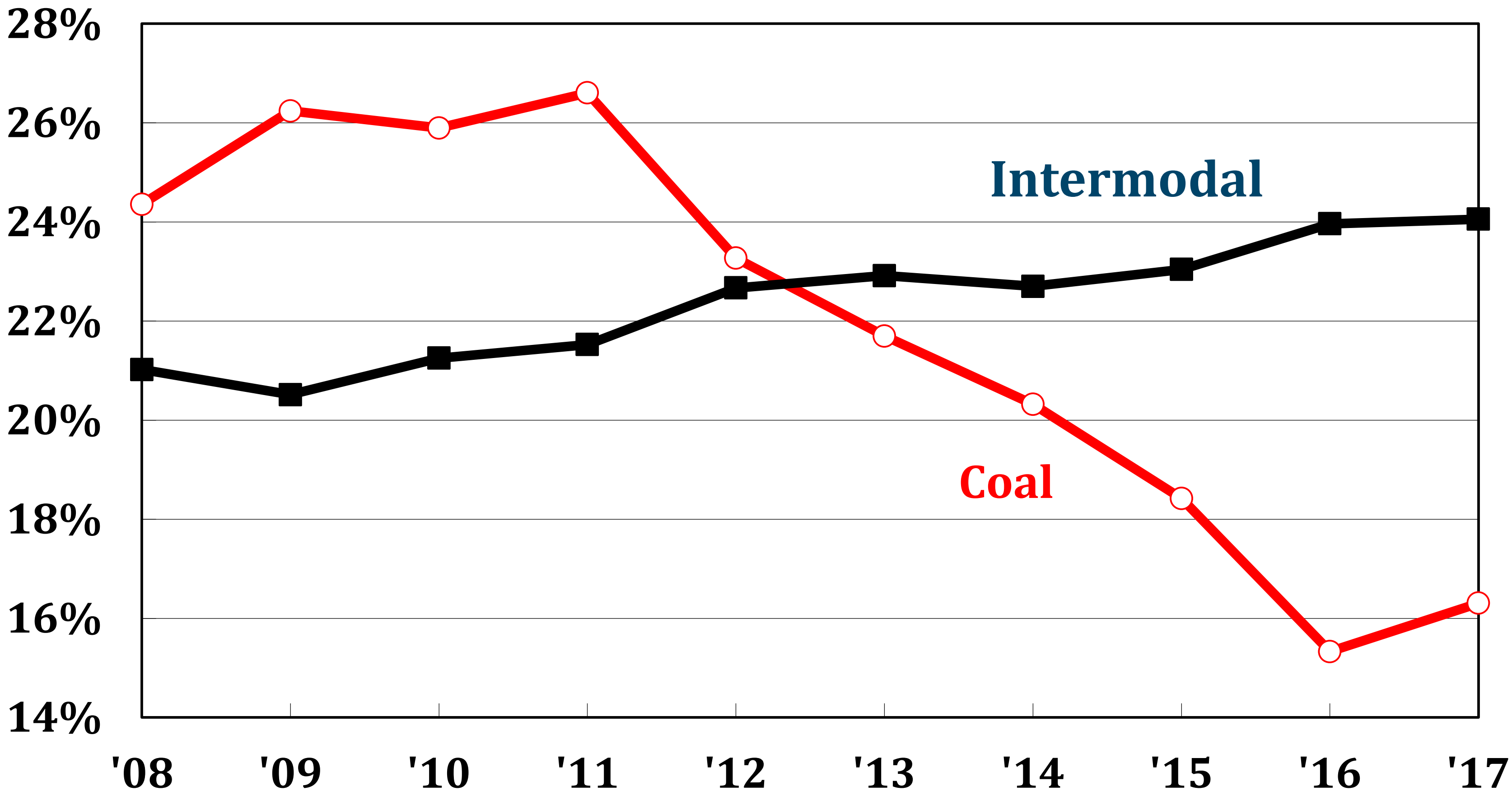
Data are originated tons for Class I railroads. Source: AAR (*Freight Commodity Statistics*)

Coal as % of U.S. Railroad Revenue



Source: AAR (*Freight Commodity Statistics*)

Coal vs. Intermodal as % of U.S. Rail Revenue



Data are for BNSF, CSX, KCS, NS, and UP combined. Source: company reports

Service is Even More Critical

Continuing (& Continuous) Traffic Mix Shifts Toward Service-Sensitive Freight; Growth drivers shifting to optimized service

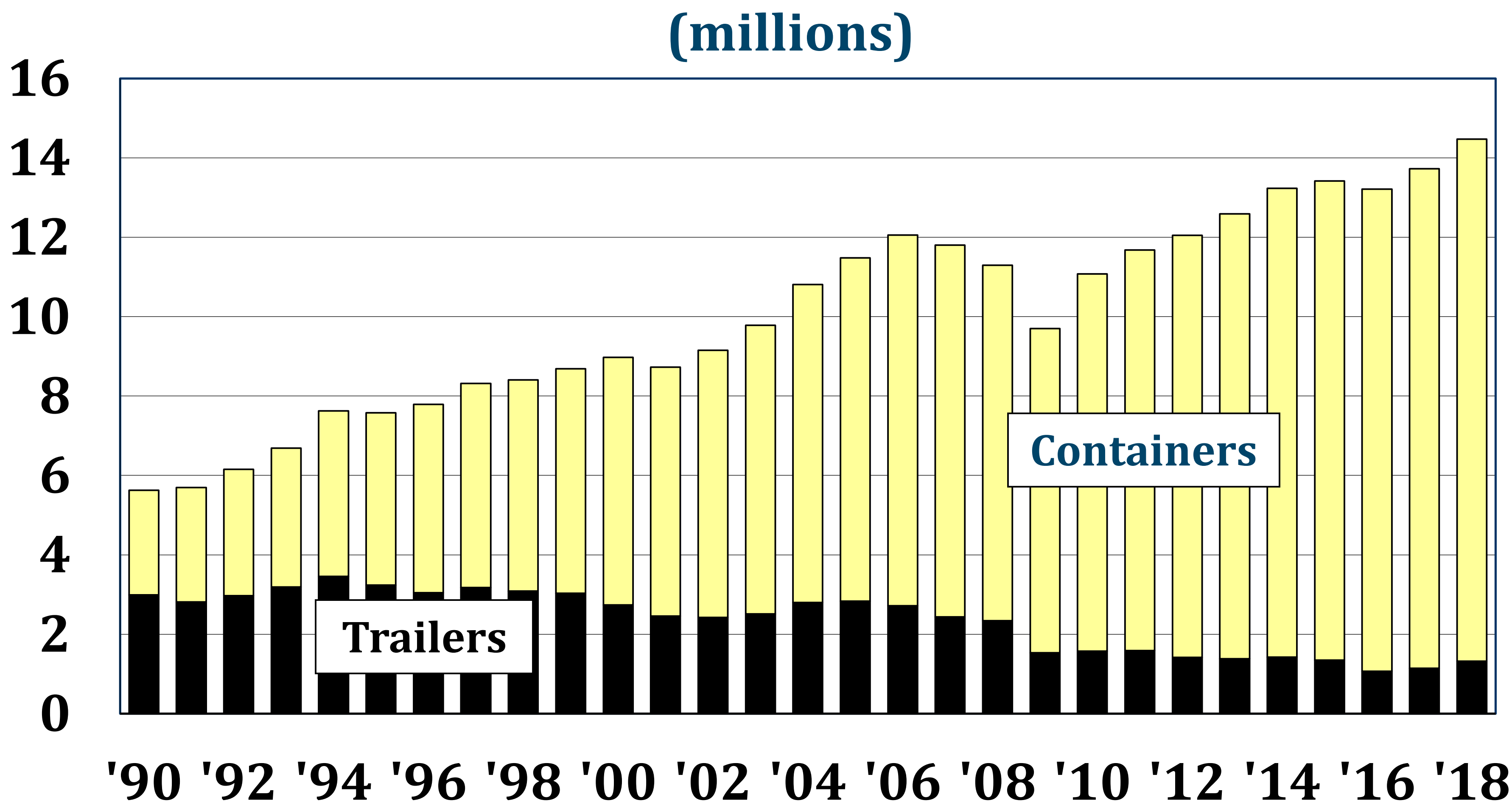
Emerging Trends:

- CSX (PSR and rail service) – asset-intensive focus
- 2017-18 AAR "Metrics" – Need improvement
- Longer trains, parked equipment
- OR Focus (vs ROIC) –cost, not service-sensitivity?
- Capex boom past peak? Forecast range 15-20%+ of revenues
- CN – orders 260 locos, renews hiring; CP & CN order Ag cars
- Increased IT spend (predictive MoW, ease-of-doing-business, visibility, etc.)
- Insourcing vs. Outsourcing

The “Grand Bargain”

- *In return for higher prices (& ROI), rails spend, increase capacity & improve service* (2005-2012) – The unstated **“Grand Bargain”**
- Rails gain pricing power (~2003) & F/S
- Rails (re) Gain Market Share
- Rails Spend Cash “Disproportionately” on Capex (~18-20% of revenues)
- Promotes “*Virtuous Circle*” – all stakeholders benefit
- Under challenge, perceived and real – *Vicious Circle?*

Rapid Intermodal Growth



Source: AAR *Weekly Railroad Traffic*

RR/Intermodal: Threats

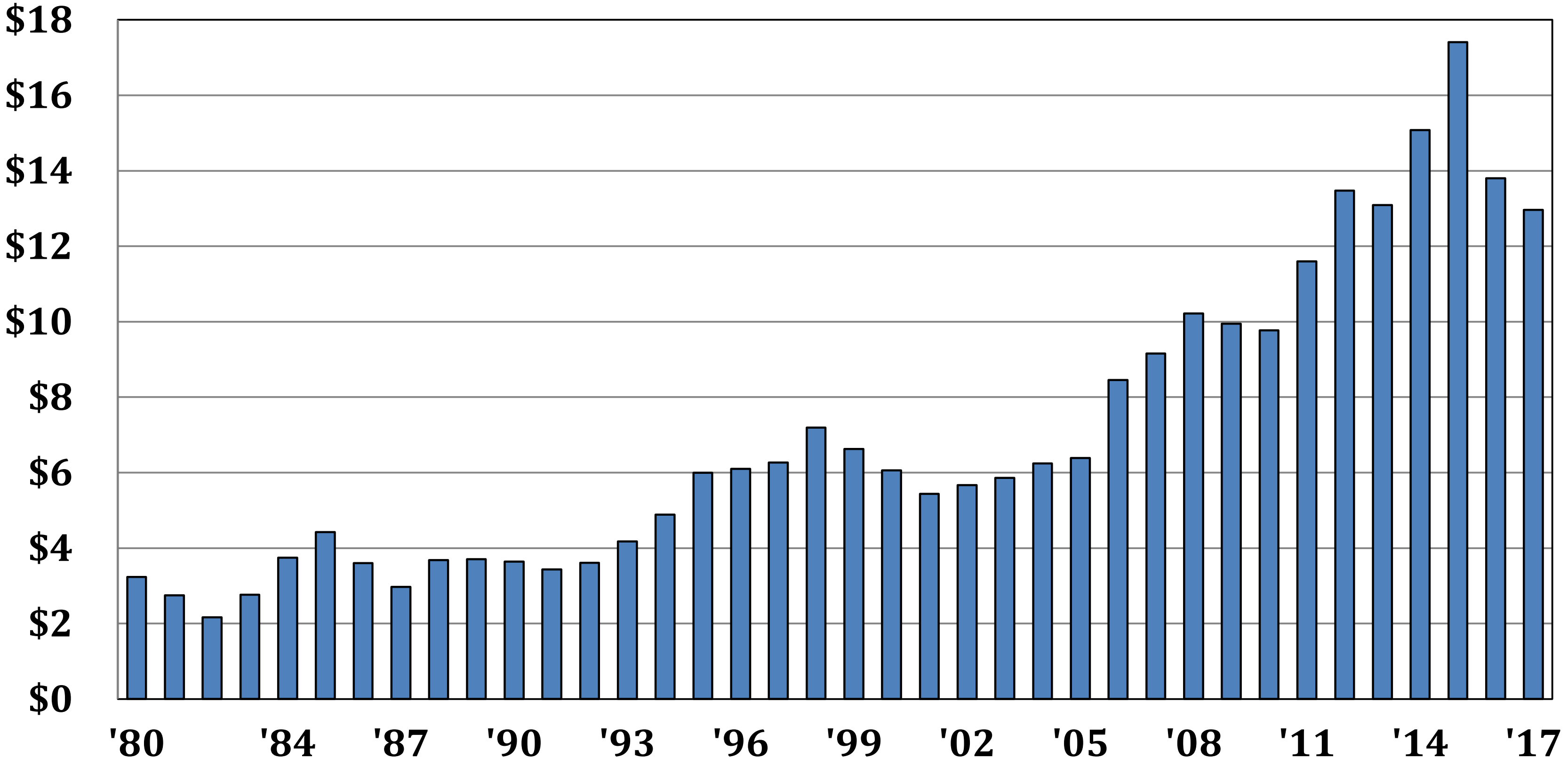
- AV Trucking – putting 20% of the RR/IM market at risk (and all of the growth?)
- EVs reducing RR's historic 4-5X fuel advantage\
- Infrastructure Bill to reduce RR/IM's huge network advantage? (hint: unlikely)
- Trade war hurts all transport (and more)
- Loss of key suppliers/allies? (GET?)
- Amazon (etc.) moving further into logistics – threat or opportunity?
- Short-termism
- Regulation (so far beaten – see ECP, etc.)

Rail Response

- Regaining IT “mojo” – OW - is an acknowledged need
- PTC moving from Capex/Opex; 2018/20 deadlines will be met (by Class One RRs, anyway)
- PTC moving from “the unfunded mandate” to “the backbone of the digital RR” (CN, NS)
- Tech in MoW: Drones *(sigh),* predictive MoW, sensors, etc. (but thankfully NO ECP due to DP)
- 2022 Labor contract (one man consist? – see Rio in Oz, etc.)
- Driving toward ZERO derailments (for safety and service reasons)

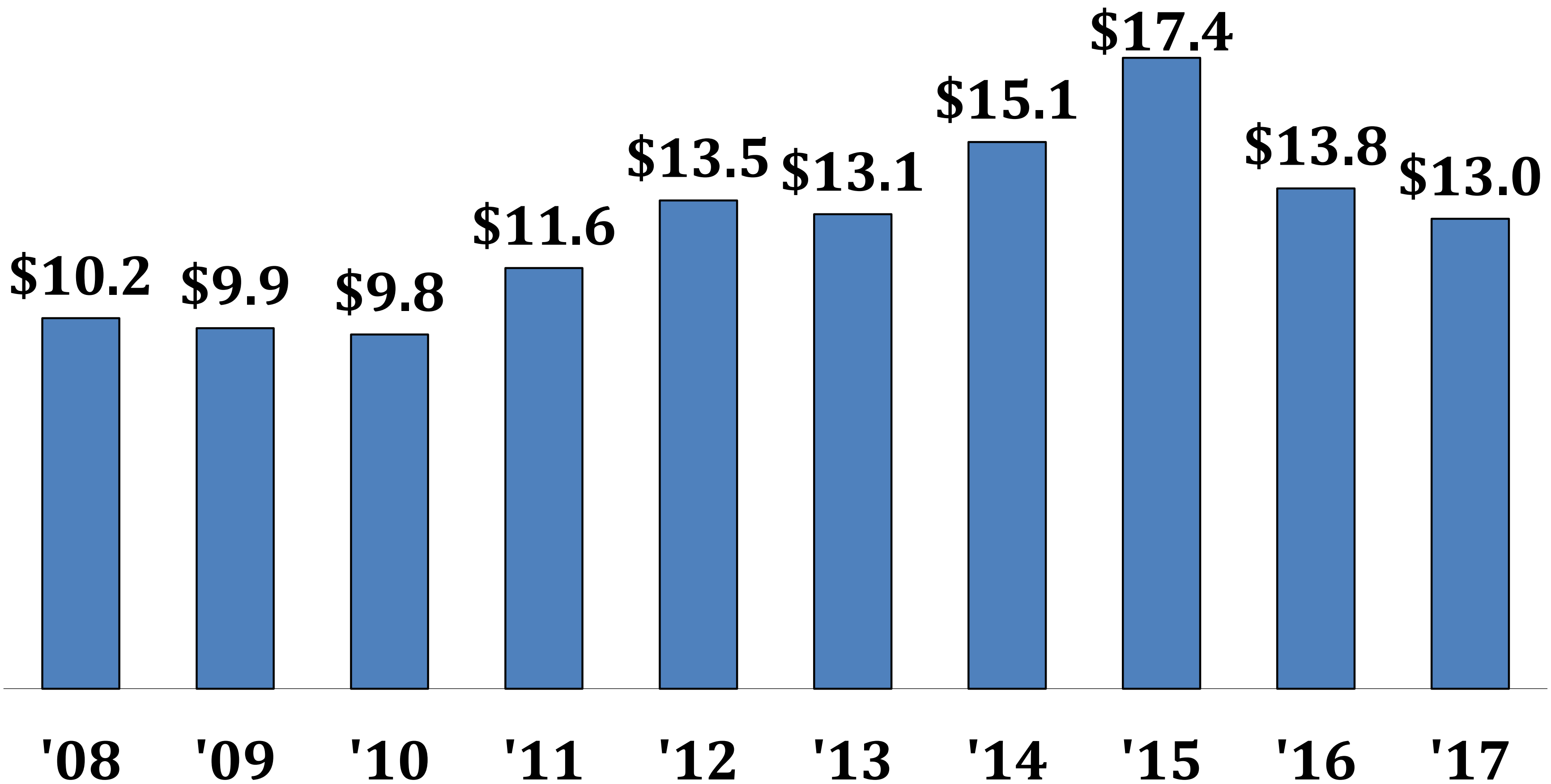
Long Term Trends: Class I Freight Railroad Capital Spending From 1980 Through 2017

($ billions)



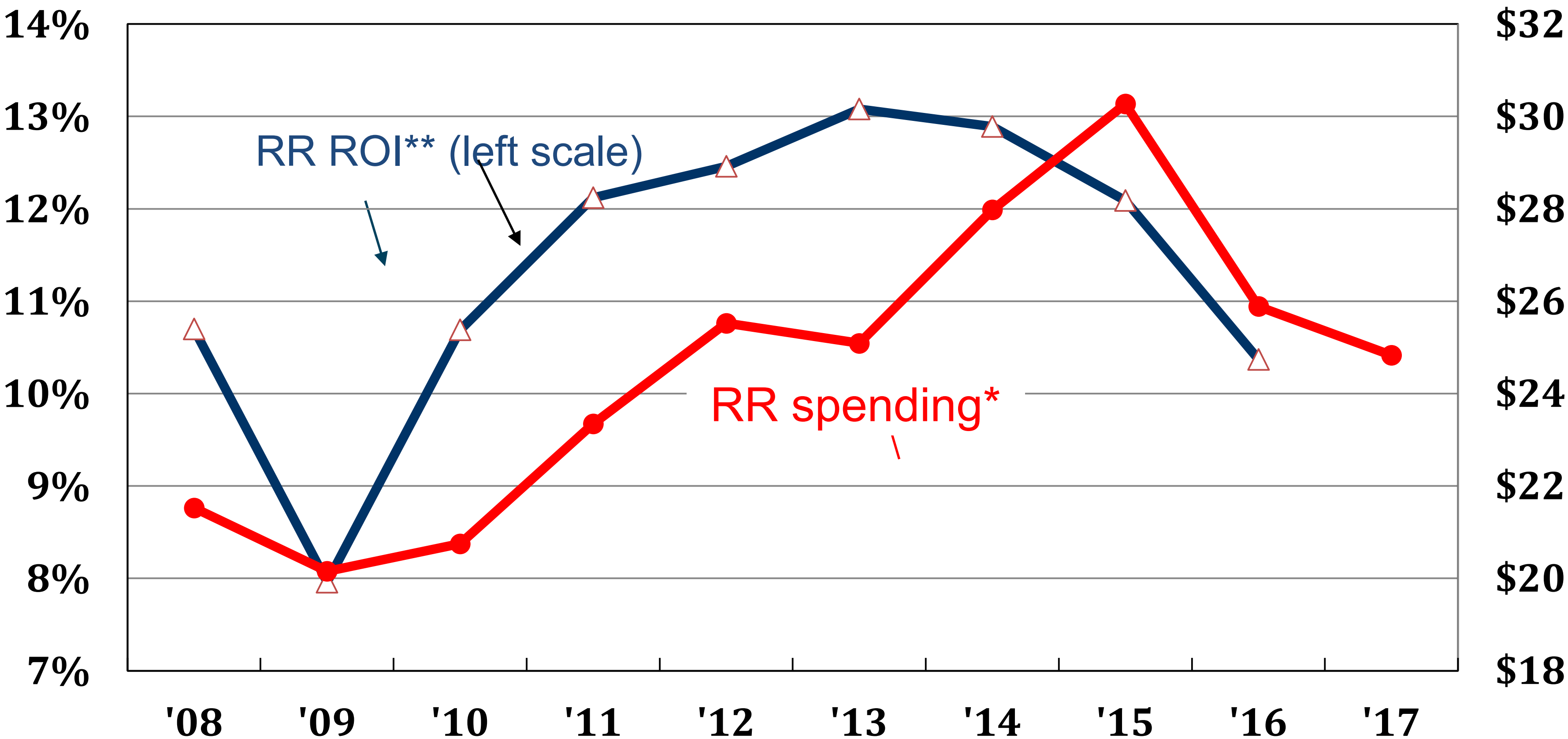
Record Railroad Capital Spending in Recent Years

($ billions)



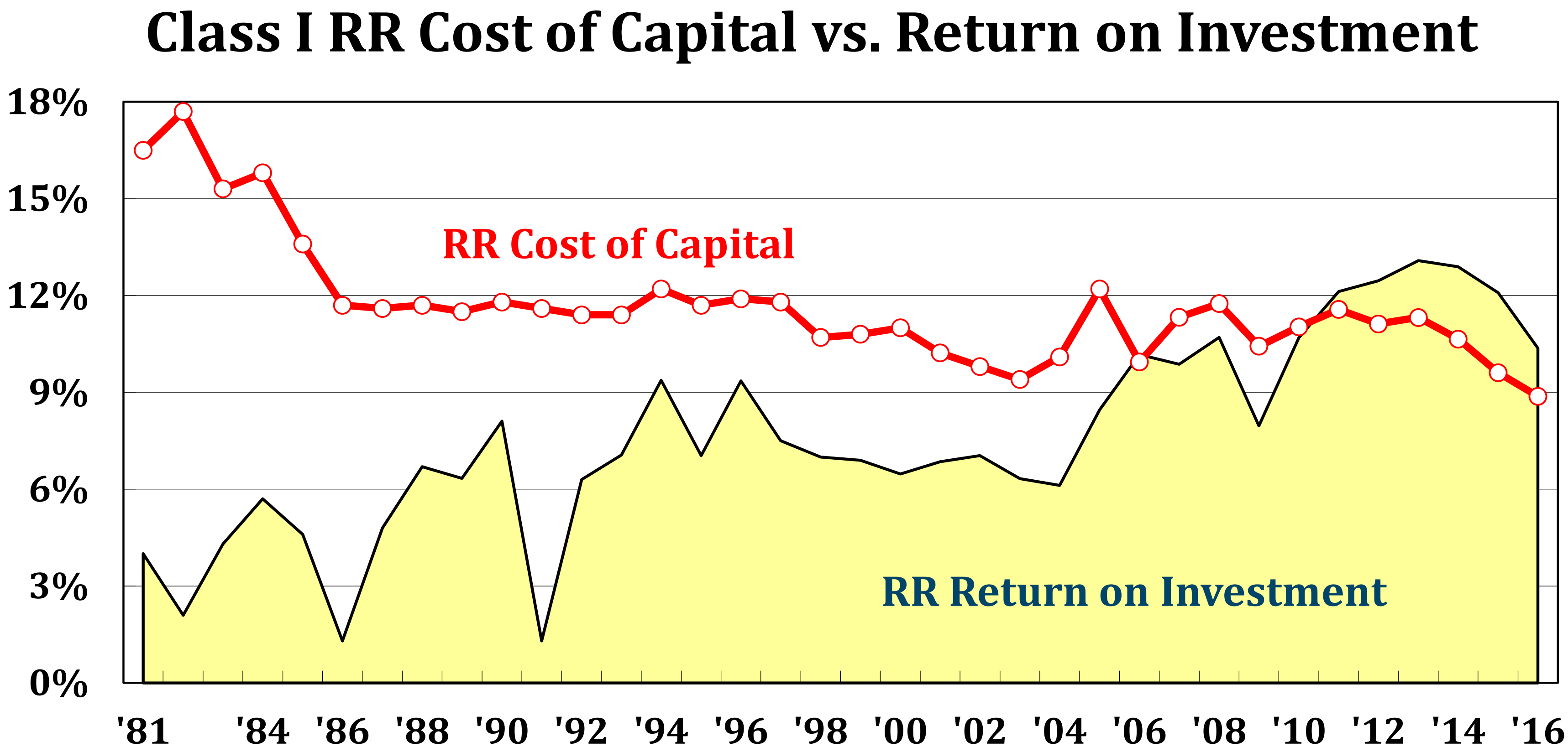
Data are for Class I railroads. Source: AAR

Close Correlation Between RR ROI and Spending



*Capital spending + maintenance expense. **Net railway operating income / average net investment in transportation property. Data are for Class I railroads. Source: AAR

Railroads Have Only in Recent Years Earned Their Cost of Capital

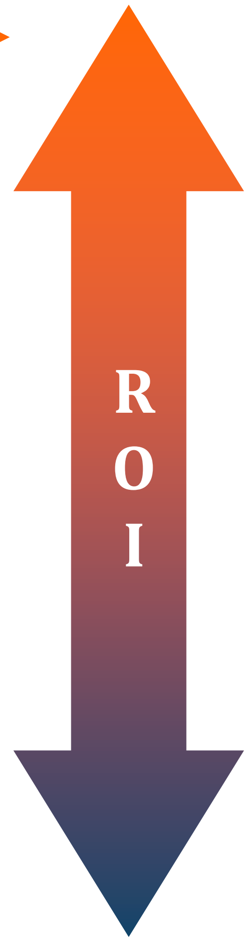


Note: In 2006, the Surface Transportation Board significantly changed the method by which it calculates the rail industry cost of capital. Source: STB

Return on Investment is Crucial

If ROI > cost of capital:

- Capital spending expands
- Stronger physical plant; more and better equipment.
- Faster, more reliable service
- Sustainability
- Safety!

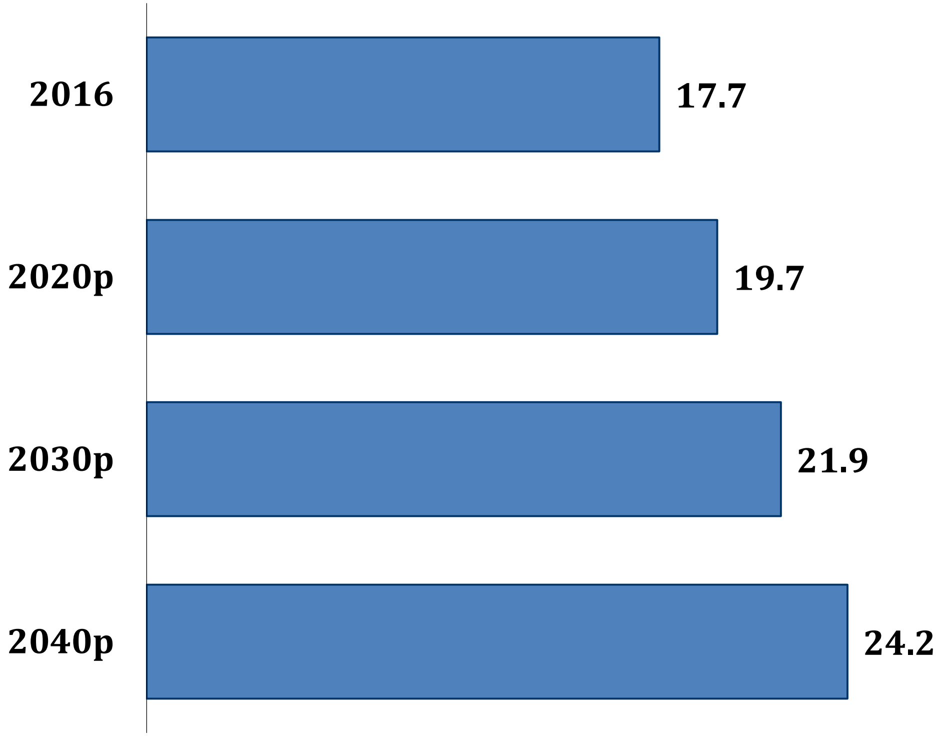


If ROI < cost of capital:

- Lower capital spending
- Weaker physical plant, equipment
- Slower, less reliable service
- Disinvestment

Long-Term Demand for Freight Transportation Will Grow

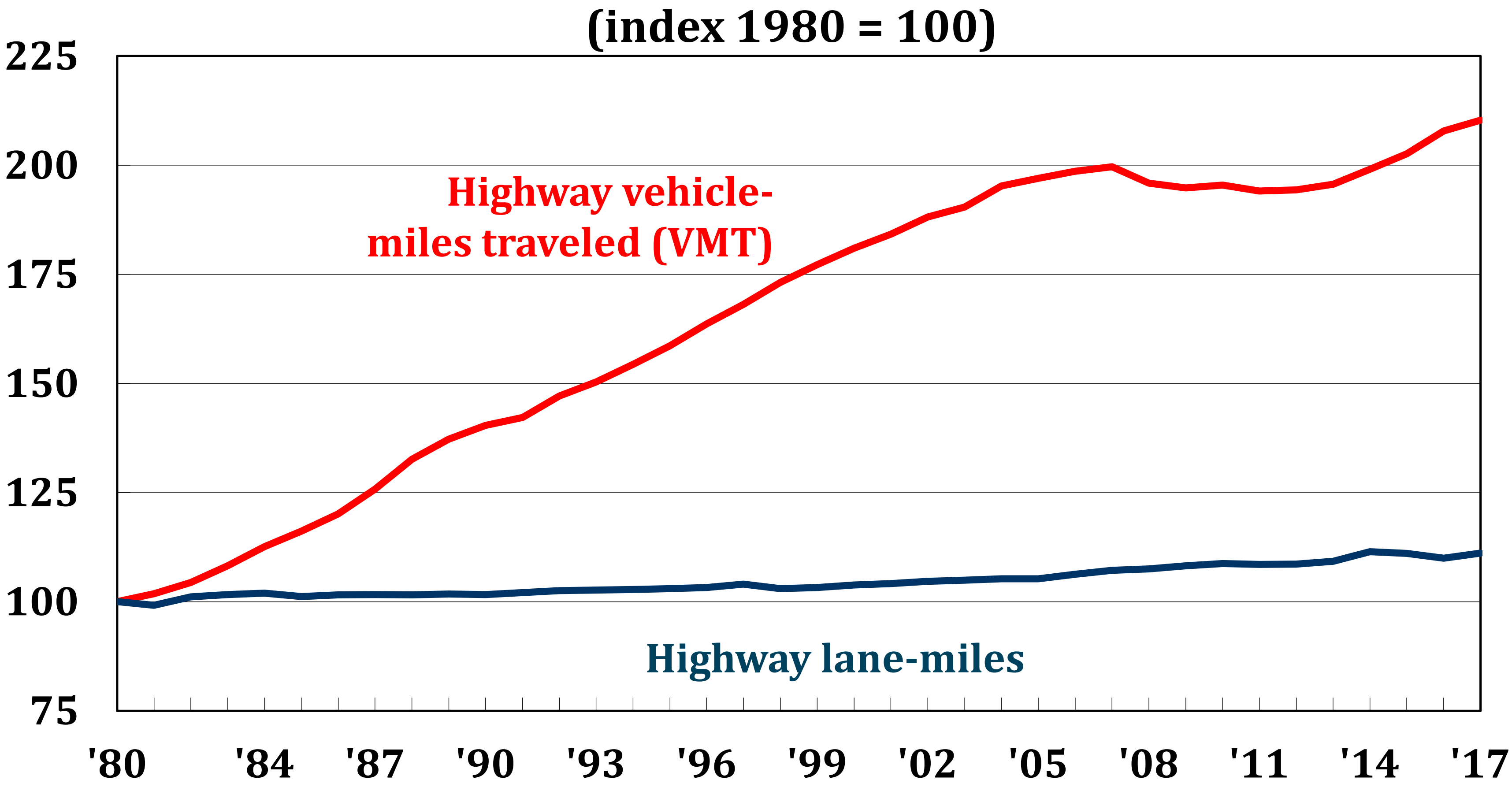
Billions of Tons of Freight Transported in the U.S.



The U.S. DOT forecasts total U.S. freight movements to rise from around 17.7 billion tons in 2016 to 24.2 billion tons in 2040 – a 37% increase.

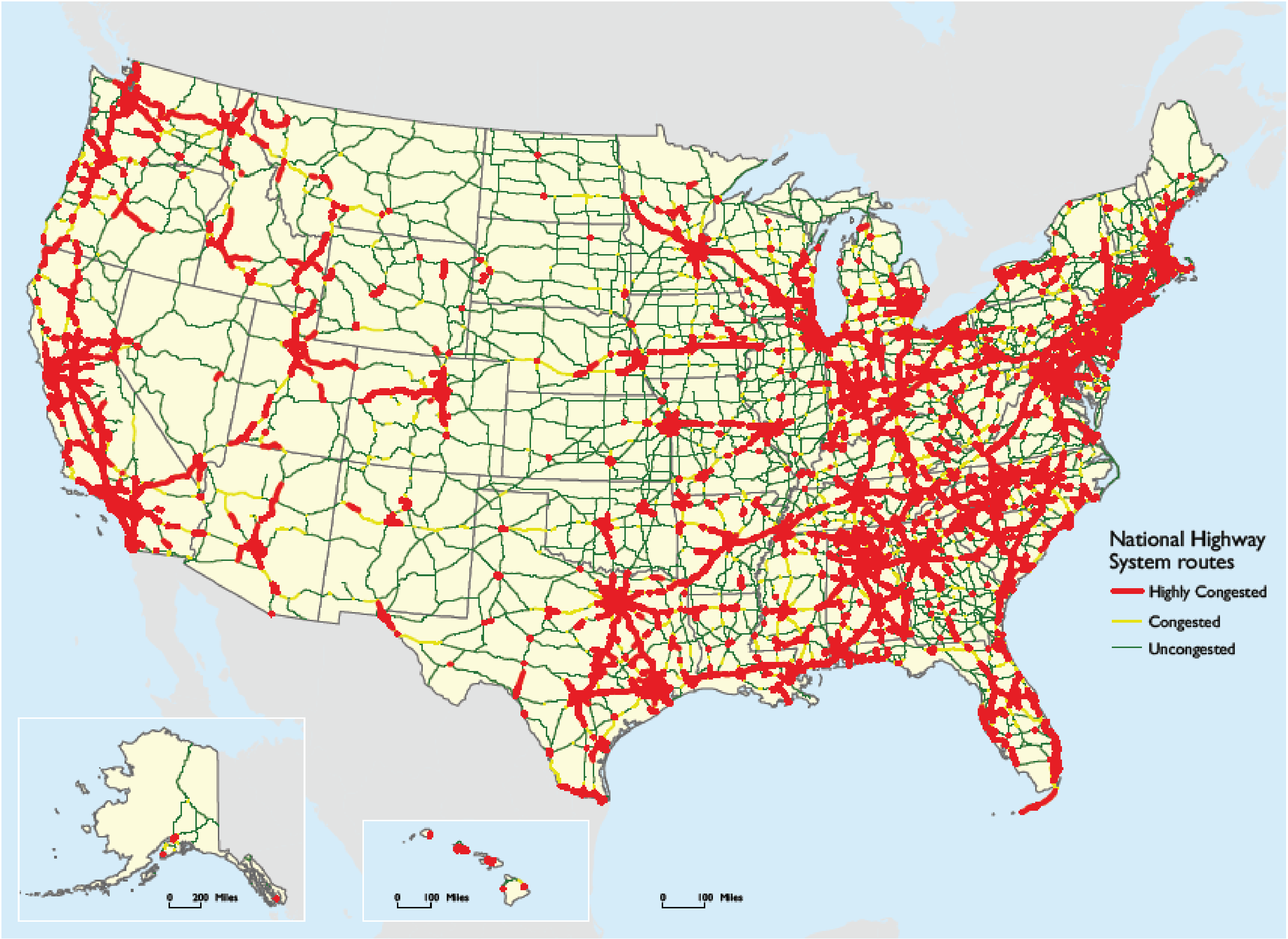
p – projected Source: FHWA - *Freight Analysis Framework*, version 4.4

Not Realistic to Think Highway Construction Will Keep Up



Source: Federal Highway Administration

Figure 4-3 Peak-Period Congestion on the National Highway System: 2040



NOTES: Highly congested segments are stop-and-go conditions with volume/service flow ratios greater than 0.95. Congested segment have reduced traffic speeds with volume/service flow ratios between 0.75 and 0.95. The volume/service flow ratio is estimated using the procedures outlined in the *Highway Performance Monitoring System Field Manual*, Appendix N.

SOURCE: U.S. Department of Transportation, Federal Highway Administration, Office of Freight Management and Operations, *Freight Analysis Framework*, version 3.5, 2015.

“Our Troubled Industry*”?

- 2017 OR averaged ~63%, improving by ~200+bps
- Rail Network in best-ever condition
- Rail Finance in best-ever condition
- Coal has stabilized, at least
- Volumes have inflected H216 (and growth has continued even as comparisons get tougher)
- Intermodal is growing again
- *What’s next?*

**Trains Magazine March 2017*

Enduring (?) Railroad Competitive Advantages

1. Labor Advantage (ex: Double-stack LA-Chi.)*
2. Fuel Advantage (4:1 ton/mile; AAR)**
3. Infrastructure Advantage (after the HIS buildout; user-pay and capex to support changing logistics patterns – ex: transcon)***

- AV trucking?
- ** EV Trucking?
- *** Infrastructure Bill? (LOL)

ABH Consulting/www.abhatchconsulting.com

Anthony B. Hatch

1230 Park Avenue

New York, NY 10128

(917) 520-7101

ABH18@mindspring.com

www.railtrends.com